

# 1 Person struck and injured during lifting operations

## What happened

The incident occurred during decommissioning activities on board a spar, where a fire water pump skid had to be removed. It was gouged out from the top of spar in accordance with the decommissioning plan, but during the initial lift, it remained partially attached.

The crew stopped work and exchanged the rigging for a more robust solution. During the second lift attempt, the skid unexpectedly came free and made contact with an adjacent nitrogen vessel, which had previously been cut 95% loose. The sudden and unplanned release of energy led to the nitrogen vessel tank striking the injured person, who was standing in the line of fire. He fell backwards and hit his head on a diagonal bracing, causing him to lose his helmet as he fell down. The injured person was transferred back to the vessel, where a medivac was waiting to transport him to a hospital onshore.



Where people were at the time of the incident

## What went wrong

The investigation revealed that:



Line of Fire

Mechanical Lifting

Applicable

**Life Saving** 

Rule(s)

A similar fire water pump skid and Nitrogen tank set up



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- The skid was still attached to the deck of the spar by inner/underneath welds, which were unknown during the work preparations;
- The decommissioning project had been prepared in a short time frame, which had an major impact on resources;
- There was no appropriate Control of Work nor Management of Change before the second lift attempt;
- Some objections / feedback given by crew members before proceeding with the second attempt, had not been acted upon.

## Lessons

- Allocate enough time and resources to perform project preparations;
- Ensure that Control of Work and Management of Change processes are rigorously applied in order to identify unknown hazards and mitigate any potential risks;
- LISTEN when concerns are raised;
- **STOP** when things are not going according to plan;
- Take the time required to REASSESS the situation with your boss and with your colleagues before proceeding.

## Members may wish to refer to:

- Near miss: load lifted without notice putting crew in the line of fire
- Lost time injury (LTI): Rigger struck by rigging under tension
- Fatality during lifting operations

## 2 Person pulled to deck by fall arrest harness

## What happened?

During moonpool preparations for running the a tool in the hole, the crane whip line was being lowered to deck under supervision of the deck supervisor. A third-party contract worker walked over the moonpool landing area with a fall arrestor connected to his harness. The swinging whip line contacted the



wire of the fall arrestor, pulling the person to the deck of the moonpool platform. No injuries were reported by the person at the time of the incident.



Showing person in green helmet before incident. His fall arrest line illustrated in red



Showing person in green helmet pulled to the deck and crane block at top left

## What went wrong

- Lack of communication between the deck supervisor and the third-party contract worker;
- The third-party contract worker did not receive any instruction to stand clear during the operation;

- The whip line was lowered into area while operations were ongoing;
- The workers' fall arrest was connected to the opposite side of the moonpool;
- There was a lack of situational and operational awareness the person placed themselves in the line of fire;
- Parallel or simultaneous activities were being conducted.

### What was the cause

Our member noted that:

- The immediate causes were:
  - Inadequate preparations/planning.
- The root causes were:
  - Inadequate discipline;
  - Inadequate supervision;
  - Inadequate reinforcement of proper behaviour.

#### Lessons

- Improve communication between personnel working together (deck crew and third-party contractors);
- Use taglines particularly in rough conditions or in congested areas;
- All personnel should remain clear when whip line is being lowered in the area;
- Take care to consider the safest connection point for your safety harness.

## 3 High potential: sea water inlet pipe leakage in engine room

#### What happened

Vessel crew noticed seawater ingress on a pipe very close to the inside of the hull. The leak was noticed whilst the vessel was offshore when engine crew were conducting routine weekly maintenance of the sea chest. While working on this, they noticed sea water leakage in the adjoining tank room from a condenser pipe of the AC system, just a few centimetres length from the ship's side just underneath the connecting valve flange. This pipe is always underwater and thus subjected to continuous hydrostatic pressure.

An alarm was raised, and situation was immediately bought to attention of all crew.

## What went wrong

- The vessel planned maintenance system had no documented general condition checks of such ship side valves and associated piping systems;
- The affected pipes had Determination
  last been inspected sease
  before the vessel's 5
  yearly renewal dry dock in 2020;



Deteriorated condition of sea suction pipe leading to leakage



Temporary repairs with a cement box to restrict water leakage

• The pipe section was heavily corroded and could have resulted into more leakage with potential catastrophic results.

## **Corrective actions**

- Immediately a cement box was constructed around the pipe/valve, to contain the leakage;
- The vessel went subsequently into emergency dry dock for permanent repairs.

#### Lessons

- Identify all such seawater ship-side valves and associated piping and ensure that a general condition check is added to the vessel's planned maintenance system and conducted on a regular basis;
- Carry out a thorough inspection and condition check of such pipes before intermediate & renewal dry dockings to analyze their health and anticipated longevity, and use such opportunities for renewal works to avoid emergency dockings.

Members may wish to refer to:

- Vessel flooding incident
- Potential engine room flooding: maintenance and equipment failure issues on a laid-up vessel

## 4 Security: Illegal boarding - theft while the vessel at anchor

#### What happened?

An intruder armed with a knife boarded a vessel at anchor in Luanda, Angola. The intruder was discovered during the hours of darkness when a member of the crew was conducting a security patrol. An unidentified individual was

observed on the starboard side of Bdeck. The crew member immediately reported the sighting to the bridge and the alarm was raised, alerting others to the presence of the intruder who was armed with a knife. The general alarm was activated, and the Master was called to the bridge.



Upon hearing the alarm, the unidentified individual jumped overboard escaped aboard a skiff. Before fleeing, the individual removed one life buoy with a lamp and two life buoys, and threw them into the water.

The bridge team monitored the skiff's movements on the radar as it approached another vessel, which was anchored adjacent to the vessel's port side. Communication regarding the skiff was made to the vessel via VHF radio. Subsequently, the skiff disappeared from radar tracking.

In response to the situation, the Master implemented double watch duties onboard the vessel to enhance security.

#### What went right

- The crew member immediately reported the sighting to the bridge and the alarm was raised;
- The incident was promptly reported to port control and to the adjacent vessel;
- Security patrols were being carried out in accordance with the Ship Security Plan.

#### What went wrong

The immediate cause of the security incident can be attributed to the vulnerability of the vessel, as there are many places where individuals with the intention of theft can use to board the vessel;

- The outer anchorage of Luanda has recently experienced several incidents of illegal boarding/theft;
- The vessel's team had discussed the security threats in the Luanda anchorage area during their Toolbox Talk prior to dropping anchor, however, no additional measures were implemented before the fact;

- Evidence suggests that the unidentified person boarded the vessel by climbing the vessel's tyre fenders/rescue boat area;
- This particular vessel is equipped with a boat landing which increases her vulnerability.
- The number of fishing vessels in the outer anchorage area makes it difficult for anchored vessels to identify those posing a security threat or intending to engage in illegal boarding or theft;
- The vessel's team was advised to take additional security measures when dropping anchor at the outer anchorage area in response to the recent security incidents, however, no additional measures were implemented.

#### Lessons learned

- Vessels should conduct thorough security briefings and analyses before anchoring, especially in areas known for security risk. This includes reviewing recent incidents and implementing appropriate measures to mitigate potential threats;
- Coordination with port control and neighbouring vessels is vital during security incidents. Reporting the incident to port control enabled appropriate authorities to be informed and take necessary actions. Additionally, informing nearby vessels via VHF radio enhances collective awareness and response capabilities.
- Continuous monitoring of radar and vigilance in observing suspicious activities are essential to track potential threats. In response to the incident, implementing double watch duties demonstrates a proactive approach to enhancing security measures onboard.
- A security alert was circulated to the fleet to maintain a vigilant lookout;
- Crew should be familiar with the security threats wherever the vessel may be;
- Ship's deck and areas surrounding the ship should be illuminated sufficiently;
- Consider the following:
  - Increasing the frequency of security patrols, as well as requiring closer monitoring of CCTV cameras (where fitted);
  - Maintaining an all-round lookout from an elevated position;
  - Enhanced vigilance/additional lookout for exposed areas; ship's fenders, the boat landing;
  - Careful watch on radar and monitoring of all navigational warnings;
  - Better barriers to prevent illegal boarding using the boat landing or rescue boat area.

## Members may wish to refer to

- Theft from vessel at anchor (at Callau, Peru, in 2019)
- IMCA HSSE 018 Guidance on security threat risk assessment procedures
- IMCA HSSE 037 Security measures and emergency response guidance

## 5 MSF: Chemical Handling – Eye Burn

## What happened

The Marine Safety Forum published Safety Alert 23-20 relating to someone getting an eye injury as a result of getting chemicals in their eye. The incident occurred when an engineer was preparing equipment for treating fuel tanks with biocide. Correct PPE was used for



the job and a toolbox talk was carried out. A portable pneumatic pump was in use for this job. During checks of the pump, a small splash/spray was released from the hose.

At that exact moment someone was passing by on the deck below. A few drops of biocide splashed on to that persons' head. Although safety glasses were worn, some of the chemical caused irritation in the persons' eye. He immediately went to the workshop to wash his eyes with water, alerted the engineer who provided eyewash liquid

and informed the bridge about the incident. The Chief Officer provided first aid and transport to the hospital was arranged. The incident resulted in a small burn to the eye and the injured person was provided with antibiotic cream for several days.



#### What went wrong

The following was noted:

- A toolbox talk had been held but no safeguards where put in place to prevent encroachment around or below the area of the chemical transfer operation;
- The areas around and below the chemical transfer operation had not been taped off, (hazard tape) or signage posted to prevent personnel not involved in the operation from entering the area.

#### What was the cause

There was inadequate assessment of the risks involved: even drops of fluid are dropped objects. The area underneath ought to have been barriered off.

#### **Corrective actions**

- Relocate this chemical transfer operation to a more suitable location;
- Review risk assessment;
- Reiterate chemical handling issues in toolbox talks / safety meeting.

Members may wish to refer to:

- Grease itself is a dropped object!
- De-Rusting Incident Resulting In Eye Injury
- Eye injury: Crewman got something in his eye when removing his PPE